RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/575, 457 _____

Source: _____ JFWP _____

Date Processed by STIC: _____ 05/04/2006 _____

ENTERED

RAW SEQUENCE LISTING   DATE: 05/04/2006
PATENT APPLICATION: US/10/575,457   TIME: 12:47:45

Input Set : **A:\08576.0004-00000 Sequence Listing.txt**
Output Set: **N:\CRF4\05042006\J575457.raw**

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 3 <110> APPLICANT: Elan Pharmaceuticals, Inc.
 4       Zhao, Byron
 5       Mei, Yu
 7 <120> TITLE OF INVENTION: Neuroprotective Effects of ATF6
 9 <130> FILE REFERENCE: 08576.0004-00304
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/575,457
C--> 12 <141> CURRENT FILING DATE: 2006-04-12
14 <150> PRIOR APPLICATION NUMBER: 60/491,565
15 <151> PRIOR FILING DATE: 2003-08-01
17 <160> NUMBER OF SEQ ID NOS: 11
19 <170> SOFTWARE: PatentIn version 3.2
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 10
23 <212> TYPE: DNA
24 <213> ORGANISM: human, rat, murine
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49 <211> LENGTH: 670
50 <212> TYPE: PRT
51 <213> ORGANISM: human
53 <400> SEQUENCE: 4
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59 Pro Gly Leu Phe His Arg Leu Asp Glu Asp Trp Asp Ser Ala Leu Phe
60             20                  25                  30
63 Ala Glu Leu Gly Tyr Phe Thr Asp Thr Asp Glu Leu Gln Leu Glu Ala
64         35                  40                  45
67 Ala Asn Glu Thr Tyr Glu Asn Asn Phe Asp Asn Leu Asp Phe Asp Leu
68     50                  55                  60
71 Asp Leu Leu Pro Trp Glu Ser Asp Ile Trp Asp Ile Asn Asn Gln Ile
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72 65                      70              75                  80
75 Cys Thr Val Lys Asp Ile Lys Ala Glu Pro Gln Pro Leu Ser Pro Ala
76                 85                  90                  95
79 Ser Ser Ser Tyr Ser Val Ser Ser Pro Arg Ser Val Asp Ser Tyr Ser
80              100             105                 110
83 Ser Thr Gln His Val Pro Glu Glu Leu Asp Leu Ser Ser Ser Ser Gln
84        115                 120                 125
87 Met Ser Pro Leu Ser Leu Tyr Gly Glu Asn Ser Asn Ser Leu Ser Ser
88      130                 135                 140
91 Pro Glu Pro Leu Lys Glu Asp Lys Pro Val Thr Gly Ser Arg Asn Lys
92 145                 150                 155                 160
95 Thr Glu Asn Gly Leu Thr Pro Lys Lys Lys Ile Gln Val Asn Ser Lys
96                 165                 170                 175
99 Pro Ser Ile Gln Pro Lys Pro Leu Leu Leu Pro Ala Ala Pro Lys Thr
100             180                 185                 190
103 Gln Thr Asn Ser Ser Val Pro Ala Lys Thr Ile Ile Ile Gln Thr Val
104         195                 200                 205
107 Pro Thr Leu Met Pro Leu Ala Lys Gln Gln Pro Ile Ile Ser Leu Gln
108.    210                 215                 220
111 Pro Ala Pro Thr Lys Gly Gln Thr Val Leu Leu Ser Gln Pro Thr Val
112 225                 230                 235                 240
115 Val Gln Leu Gln Ala Pro Gly Val Leu Pro Ser Ala Gln Pro Val Leu
116             245                 250                 255
119 Ala Val Ala Gly Gly Val Thr Gln Leu Pro Asn His Val Val Asn Val
120             260                 265                 270
123 Val Pro Ala Pro Ser Ala Asn Ser Pro Val Asn Gly Lys Leu Ser Val
124     275                 280                 285
127 Thr Lys Pro Val Leu Gln Ser Thr Met Arg Asn Val Gly Ser Asp Ile
128     290                 295                 300
131 Ala Val Leu Arg Arg Gln Gln Arg Met Ile Lys Asn Arg Glu Ser Ala
132 305                 310                 315                 320
135 Cys Gln Ser Arg Lys Lys Lys Lys Glu Tyr Met Leu Gly Leu Glu Ala
136             325                 330                 335
139 Arg Leu Lys Ala Ala Leu Ser Glu Asn Glu Gln Leu Lys Lys Glu Asn
140         340                 345                 350
143 Gly Thr Leu Lys Arg Gln Leu Asp Glu Val Val Ser Glu Asn Gln Arg
144     355                 360                 365
147 Leu Lys Val Pro Ser Pro Lys Arg Arg Val Val Cys Val Met Ile Val
148     370                 375                 380
151 Leu Ala Phe Ile Ile Leu Asn Tyr Gly Pro Met Ser Met Leu Glu Gln
152 385                 390                 395                 400
155 Asp Ser Arg Arg Met Asn Pro Ser Val Gly Pro Ala Asn Gln Arg Arg
156             405                 410                 415
159 His Leu Leu Gly Phe Ser Ala Lys Glu Ala Gln Asp Thr Ser Asp Gly
160     420                 425                 430
163 Ile Ile Gln Lys Asn Ser Tyr Arg Tyr Asp His Ser Val Ser Asn Asp
164     435                 440                 445
167 Lys Ala Leu Met Val Leu Thr Glu Glu Pro Leu Leu Tyr Ile Pro Pro
168     450                 455                 460
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RAW SEQUENCE LISTING   DATE: 05/04/2006
PATENT APPLICATION: US/10/575,457   TIME: 12:47:45

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175 His Glu Leu Arg Gly Trp Val His Arg His Glu Val Glu Arg Thr Lys
176             485             490             495
179 Ser Arg Arg Met Thr Asn Asn Gln Gln Lys Thr Arg Ile Leu Gln Gly
180             500             505             510
183 Val Val Glu Gln Gly Ser Asn Ser Gln Leu Met Ala Val Gln Tyr Thr
184             515             520             525
187 Glu Thr Thr Ser Ser Ile Ser Arg Asn Ser Gly Ser Glu Leu Gln Val
188             530             535             540
191 Tyr Tyr Ala Ser Pro Arg Ser Tyr Gln Asp Phe Phe Glu Ala Ile Arg
192 545             550             555             560
195 Arg Arg Gly Asp Thr Phe Tyr Val Val Ser Phe Arg Arg Asp His Leu
196             565             570             575
199 Leu Leu Pro Ala Thr Thr His Asn Lys Thr Thr Arg Pro Lys Met Ser
200             580             585             590
203 Ile Val Leu Pro Ala Ile Asn Ile Asn Glu Asn Val Ile Asn Gly Gln
204             595             600             605
207 Asp Tyr Glu Val Met Met Gln Ile Asp Cys Gln Val Met Asp Thr Arg
208             610             615             620
211 Ile Leu His Ile Lys Ser Ser Ser Val Pro Pro Tyr Leu Arg Asp Gln
212 625             630             635             640
215 Gln Arg Asn Gln Thr Asn Thr Phe Phe Gly Ser Pro Pro Ala Ala Thr
216             645             650             655
219 Glu Ala Thr His Val Val Ser Thr Ile Pro Glu Ser Leu Gln
220             660             665             670
223 <210> SEQ ID NO: 5
224 <211> LENGTH: 703
225 <212> TYPE: PRT
226 <213> ORGANISM: human
228 <400> SEQUENCE: 5
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234 Phe Thr Asp Asn Leu Leu Ser Pro Glu Asp Trp Gly Leu Gln Asn Ser
235             20              25              30
238 Thr Leu Tyr Ser Gly Leu Asp Glu Val Ala Glu Glu Gln Thr Gln Leu
239             35              40              45
242 Phe Arg Cys Pro Glu Gln Asp Val Pro Phe Asp Gly Ser Ser Leu Asp
243 50              55              60
246 Val Gly Met Asp Val Ser Pro Ser Glu Pro Pro Trp Glu Leu Leu Pro
247 65              70              75              80
250 Ile Phe Pro Asp Leu Gln Val Lys Ser Glu Pro Ser Ser Pro Cys Ser
251             85              90              95
254 Ser Ser Ser Leu Ser Ser Glu Ser Ser Arg Leu Ser Thr Glu Pro Ser
255             100             105             110
258 Ser Glu Ala Leu Gly Val Gly Glu Val Leu His Val Lys Thr Glu Ser
259             115             120             125
262 Leu Ala Pro Pro Leu Cys Leu Leu Gly Asp Asp Pro Thr Ser Ser Phe
263             130             135             140
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266 Glu Thr Val Gln Ile Asn Val Ile Pro Thr Ser Asp Asp Ser Ser Asp
267 145                 150                 155                 160
270 Val Gln Thr Lys Ile Glu Pro Val Ser Pro Cys Ser Ser Val Asn Ser
271                 165                 170                 175
274 Glu Ala Ser Leu Leu Ser Ala Asp Ser Ser Ser Gln Ala Phe Ile Gly
275                 180                 185                 190
278 Glu Glu Val Leu Glu Val Lys Thr Glu Ser Leu Ser Pro Ser Gly Cys
279             195                 200                 205
282 Leu Leu Trp Asp Val Pro Ala Pro Ser Leu Gly Ala Val Gln Ile Ser
283         210                 215                 220
286 Met Gly Pro Ser Leu Asp Gly Ser Ser Gly Lys Ala Leu Pro Thr Arg
287 225                 230                 235                 240
290 Lys Pro Pro Leu Gln Pro Lys Pro Val Val Leu Thr Thr Val Pro Met
291                 245                 250                 255
294 Pro Ser Arg Ala Val Pro Pro Ser Thr Thr Val Leu Leu Gln Ser Leu
295                 260                 265                 270
298 Val Gln Pro Pro Pro Val Ser Pro Val Val Leu Ile Gln Gly Ala Ile
299             275                 280                 285
302 Arg Val Gln Pro Glu Gly Pro Ala Pro Ser Leu Pro Arg Pro Glu Arg
303         290                 295                 300
306 Lys Ser Ile Val Pro Ala Pro Met Pro Gly Asn Ser Cys Pro Pro Glu
307 305                 310                 315                 320
310 Val Asp Ala Lys Leu Leu Lys Arg Gln Gln Arg Met Ile Lys Asn Arg
311                 325                 330                 335
314 Glu Ser Ala Cys Gln Ser Arg Arg Lys Lys Lys Glu Tyr Leu Gln Gly
315                 340                 345                 350
318 Leu Glu Ala Arg Leu Gln Ala Val Leu Ala Asp Asn Gln Gln Leu Arg
319             355                 360                 365
322 Arg Glu Asn Ala Ala Leu Arg Arg Leu Glu Ala Leu Leu Ala Glu
323         370                 375                 380
326 Asn Ser Glu Leu Lys Leu Gly Ser Gly Asn Arg Lys Val Val Cys Ile
327 385                 390                 395                 400
330 Met Val Phe Leu Leu Phe Ile Ala Phe Asn Phe Gly Pro Val Ser Ile
331                 405                 410                 415
334 Ser Glu Pro Pro Ser Ala Pro Ile Ser Pro Arg Met Asn Lys Gly Glu
335                 420                 425                 430
338 Pro Gln Pro Arg Arg His Leu Leu Gly Phe Ser Glu Gln Glu Pro Val
339             435                 440                 445
342 Gln Gly Val Glu Pro Leu Gln Gly Ser Ser Gln Gly Pro Lys Glu Pro
343         450                 455                 460
346 Gln Pro Ser Pro Thr Asp Gln Pro Ser Phe Ser Asn Leu Thr Ala Phe
347 465                 470                 475                 480
350 Pro Gly Gly Ala Lys Glu Leu Leu Leu Arg Asp Leu Asp Gln Leu Phe
351                 485                 490                 495
354 Leu Ser Ser Asp Cys Arg His Phe Asn Arg Thr Glu Ser Leu Arg Leu
355                 500                 505                 510
358 Ala Asp Glu Leu Ser Gly Trp Val Gln Arg His Gln Arg Gly Arg Arg
359             515                 520                 525
362 Lys Ile Pro Gln Arg Ala Gln Glu Arg Gln Lys Ser Gln Pro Arg Lys
```

```
363     530                   535                   540
366 Lys Ser Pro Pro Val Lys Ala Val Pro Ile Gln Pro Pro Gly Pro Pro
367 545               550               555               560
370 Glu Arg Asp Ser Val Gly Gln Leu Gln Leu Tyr Arg His Pro Asp Arg
371               565               570               575
374 Ser Gln Pro Ala Phe Leu Asp Ala Ile Asp Arg Arg Glu Asp Thr Phe
375               580               585               590
378 Tyr Val Val Ser Phe Arg Arg Asp His Leu Leu Leu Pro Ala Ile Ser
379           595               600               605
382 His Asn Lys Thr Ser Arg Pro Lys Met Ser Leu Val Met Pro Ala Met
383       610               615               620
386 Ala Pro Asn Glu Thr Leu Ser Gly Arg Gly Ala Pro Gly Asp Tyr Glu
387 625               630               635               640
390 Glu Met Met Gln Ile Glu Cys Glu Val Met Asp Thr Arg Val Ile His
391               645               650               655
394 Ile Lys Thr Ser Thr Val Pro Pro Ser Leu Arg Lys Gln Pro Ser Pro
395               660               665               670
398 Thr Pro Gly Asn Ala Thr Gly Gly Pro Leu Pro Val Ser Ala Ala Ser
399           675               680               685
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403       690               695               700
406 <210> SEQ ID NO: 6
407 <211> LENGTH: 678
408 <212> TYPE: PRT
409 <213> ORGANISM: mouse
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417 Ala Cys Val Ala Gly Ala Met Glu Ser Pro Phe Ser Pro Val Leu Pro
418           20               25               30
421 His Gly Pro Asp Glu Asp Trp Glu Ser Thr Leu Phe Ala Glu Leu Gly
422           35               40               45
425 Tyr Phe Thr Asp Thr Asp Asp Val His Phe Asp Ala Ala His Glu Ala
426     50               55               60
429 Tyr Glu Asn Asn Phe Asp His Leu Asn Phe Asp Leu Asp Leu Met Pro
430 65               70               75               80
433 Trp Glu Ser Asp Leu Trp Ser Pro Gly Ser His Phe Cys Ser Asp Met
434               85               90               95
437 Lys Ala Glu Pro Gln Pro Leu Ser Pro Ala Ser Ser Ser Cys Ser Ile
438           100               105               110
441 Ser Ser Pro Arg Ser Thr Asp Ser Cys Ser Ser Thr Gln His Val Pro
442       115               120               125
445 Glu Glu Leu Asp Leu Leu Ser Ser Ser Gln Ser Pro Leu Ser Leu Tyr
446     130               135               140
449 Gly Asp Ser Cys Asn Ser Pro Ser Ser Val Glu Pro Leu Lys Glu Glu
450 145               150               155               160
453 Lys Pro Val Thr Gly Pro Gly Asn Lys Thr Glu His Gly Leu Thr Pro
454               165               170               175
457 Lys Lys Lys Ile Gln Met Ser Ser Lys Pro Ser Val Gln Pro Lys Pro
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VERIFICATION SUMMARY   DATE: 05/04/2006
PATENT APPLICATION: US/10/575,457   TIME: 12:47:46

Input Set : **A:\08576.0004-00000 Sequence Listing.txt**
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L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date